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PUSHING SERVICE PIPES UNDER PAVEMENTS

By F. C. AMSBARY

Champaign and Urbana, Illinois, the municipalities we serve, with a combined population of 25,000 have a large percentage of their streets paved. It is the practice of our company to lay all water mains in the parking, that is, between the curb and the sidewalk. Before beginning the pushing of the service pipe it is necessary to dig a trench about 18 feet long, to take a full length of galvanized wrought iron pipe, the material we use for service pipe. The pipe pusher is first laid in the trench and fastened down by means of wooden stakes. It consists of an iron frame on which is a steel carriage. The pipe is laid in position on the carriage and fastened securely by a locking device. The carriage and pipe are moved forward by means of a ratchet with a long handle, the carriage travelling about 2 feet. When it has reached the end of the frame the locks are released, leaving the pipe and carriage free and carriage is moved back and pipe is again locked. This operation is repeated until the pipe has gone the required distance. In order to keep the pipe from drifting out of the straight line we turn it frequently with an ordinary pipe wrench. We seldom have any trouble in pushing the pipe to the point desired.

The soil in our streets is, in most cases, heavy clay; in sandy soils of course the pushing would be much easier.

When we have a leak in the service pipe under the pavement, instead of tearing up the pavement to repair it, we push a new service through and abandon the old one, finding it much cheaper than digging up the pavement and re-laying it, and, what is equally important, we help preserve the pavement; for no matter how well done, a pavement can not be put back quite as good as it was before.

The advantage of laying water and gas mains in the parking is not well understood by many water works people. The writer has known cases in neighboring cities where paving jobs have been held up, waiting for the water company to lay its mains, when there were wide parkings on either side of the pavements, where the mains should be laid. With the mains in the parkings the pavements will never be disturbed by reason of leaks and putting in new services.

There are several good pushing devices on the market.